

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

1. (Currently Amended): An Internet printing method comprising:
providing a proxy unit on the Internet;
opening a server site of a print server according to a request from ~~the~~ a client and/or the
print server, the server site being opened in the proxy unit;
accessing the server site by the client; and
converting a protocol into a protocol which allows circumventing ~~the~~ a firewall of the
print server, and transferring a printing service request from the client to the print server,
wherein the firewall is provided between the print server and the proxy unit.

2. (Previously Presented): The Internet printing method according to Claim 1,
further comprising:
returning an execution result of the printer server for the printing service request to the
proxy unit, and returning the execution result to the client from the proxy unit using the Internet
Printing Protocol.

3. (Previously Presented): The Internet printing method according to Claim 1,
further comprising:

connecting the proxy unit and the print server according to the connection request from the print server.

4. (Previously Presented): The Internet printing method according to Claim 3, wherein the proxy unit plays the role of a server and the print server plays a role of a client when the proxy unit and the print server are connected, and the proxy unit plays a role of a client and the print server plays the role of a server when the printing service is requested after the connection.

5. (Previously Presented): The Internet printing method according to Claim 1, further comprising:
transmitting a printing command from the client to the print server using a protocol which can circumvent the firewall; and
connecting the proxy unit and the print server according to the connection request from the print server corresponding to the printing command.

6. (Previously Presented): The Internet printing method according to Claim 1, further comprising:
a step of transmitting a printing command from the client to the proxy unit using the Internet Printing Protocol;

transferring the printing command from the proxy unit to the print server using a protocol which can circumvent the firewall; and

connecting the proxy unit and the print server according to the connection request from the print server corresponding to the transferred printing command.

7. (Previously Presented): The Internet printing method according to Claim 1, further comprising:

constantly connecting the proxy unit and the print server according to the connection request from the print server.

8. (Currently Amended): An Internet printing system comprising:
a client that communicates at least by using the Internet Printing Protocol;
a print server that is protected by a firewall on the Internet and for executing a printing service request; and

a proxy unit that opens a server site of the print server according to a request from the client and/or the print server, converts the Internet Printing Protocol used by the client for sending the printing service request into a protocol which allows circumventing the firewall of the print server at the access of the client to the server site, and transfers the request to the print server,

wherein the firewall is provided between the print server and the proxy unit.

9. (Previously Presented): The Internet printing system according to Claim 8, wherein the print server returns the execution result for the printing service request to the proxy unit and the proxy unit returns the execution result to the client using the Internet Printing Protocol.

10. (Previously Presented): The Internet printing system according to Claim 8, wherein the proxy unit is connected to the print server according to the connection request from the print server.

11. (Previously Presented): The Internet printing system according to Claim 10, wherein the proxy unit plays a role of a server and the print server plays a role of a client when the proxy unit and the print server are connected, and the proxy unit plays a role of a client and the print server plays a role of a server when the printing service is requested after the connection.

12. (Previously Presented): The Internet printing system according to Claim 8, wherein the client transmits a printing command to the print server using a protocol which can circumvent the firewall, and the proxy unit connects with the print server according to the connection request from the print server corresponding to the printing command.

13. (Previously Presented): The Internet printing system according to Claim 8, wherein the client transmits a printing command to the proxy unit using the Internet Printing Protocol, and the proxy unit transfers the printing command to the print server using a protocol which can circumvent the firewall, and connects with the print server according to the connection request from the print server corresponding to the transferred printing command.

14. (Previously Presented): The Internet printing system according to Claim 8, wherein the proxy unit is constantly connected with the print server according to the connection request from the print server.

15. (Currently Amended): A proxy unit comprising:
a server site of ~~the~~ a print server to be opened according to a request from ~~the~~ a client and/or the print server; and
an exchanger that converts a protocol used by the client for sending a printing service request into a protocol which allows circumventing ~~the~~ a firewall of the print server at ~~the~~ an access of the client to the server site, and transfers the request to the print server,
wherein the firewall is provided between the print server and the proxy unit.

16. (Previously Presented): The proxy unit according to Claim 15, wherein exchanger receives an execution result of print server for printing service request and returns to the client by the Internet Printing Protocol.

17. (Previously Presented): The proxy unit according to Claim 15, wherein the proxy unit connects with the print server according to the connection request from the print server.

18. (Previously Presented): The proxy unit according to Claim 17, wherein the proxy unit plays a role of a server and the print server plays a role of a client when the proxy unit and the print server are connected, and the proxy unit plays a role of a client and the print server plays a role of a server when the printing service is requested after the connection.

19. (Currently Amended): A printer server comprising:
a network interface for communicating; and
a processor that requests to a proxy unit installed on the Internet to open a server site of the a print server, and receives a printing service request from the proxy unit where a protocol used for a printing service request of the client is converted into a protocol which allows circumventing the firewall of the print server at the access of the client to the server site, and executes the printing service request,
wherein the firewall is provided between the print server and the proxy unit.

20. (Previously Presented): The print server according to Claim 19, wherein the proxy unit plays a role of a server and the print server plays a role of a client when the proxy unit and the print server are connected, and the proxy unit plays the role of a client and the print server plays a role of a server when the printing service is requested after the connection.

21. (Previously Presented) The Internet printing method according to claim 1, wherein the user accesses the server site by the Internet Printing Protocol, the Internet Printing Protocol is converted to a protocol which allows circumventing the firewall of the print server.

22. (Previously Presented) The Internet printing method according to claim 1, wherein the protocol which does not allow circumventing a firewall is converted to the protocol which allows circumventing the firewall of the print server at the proxy unit.

23. (Previously Presented) The proxy unit according to claim 15, wherein the user accesses the server site by the Internet Printing Protocol, the Internet Printing Protocol is converted to a protocol which allows circumventing the firewall of the print server.

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24. (Previously Presented) The printer server according to claim 19, wherein the user accesses the server site by the Internet Printing Protocol, the Internet Printing Protocol is converted to a protocol which allows circumventing the firewall of the print server.